

**ABSTRACT OF THE DISCLOSURE**

A syringe pump has a motor rotating a leadscrew to drive a plunger head actuator along it. The head actuator engages the plunger of a syringe and moves the plunger along the syringe barrel to dispense medication. An optical encoder mounted on the leadscrew is rotated by the motor to produce a pulse output. A control unit times the interval between the pulses and compares these timings with a stored value representative of a predetermined multiple of the minimum time. If the head actuator is obstructed, the speed of rotation of the motor is slowed and the time interval between pulses rises. When this exceeds the stored value, the control unit stops the drive to the head actuator and generates an alarm.